

CLAIMS

1. A machine for the orderly positioning and transfer of stackable articles, wherein stacks formed of a pre-established number of said articles are prepared, and from which said stacks are deposited on transport means, the machine including at least one station to receive said articles and at least one station to form stacks, characterized in that said station to form stacks includes at least one container equipped with a plurality of essentially vertical compartments designed to receive said articles and promote their stacking through gravity.
- 10 2. A machine according to claim 1, wherein said at least one container is movable between at least one position to accumulate said articles and at least one or more positions to release the stacks of articles thus formed.
- 15 3. A machine according to claim 1, wherein at least two of said movable containers are provided, and wherein at least one of said two containers is held in a position to accumulate the articles when the other of said containers is in said one or more positions to release the stacks, or vice versa.
- 20 4. A machine according to any of the preceding claims, wherein said at least two containers are mounted on a rotatable frame and wherein first handling means are provided to operate said frame in rotation.
- 25 5. A machine according to any of the preceding claims, wherein said at least two containers are mounted in diametrically opposed positions with respect to the axis of rotation of said frame.
6. A machine according to any of the preceding claims, wherein the axis of rotation of said frame is inclined with respect to the supporting surface of the machine.
7. A machine according to any of the preceding claims, wherein

second handling means are provided to translate said containers with respect to said frame between at least one stand-by position and said one or more release positions.

8. A machine according to any of the preceding claims, wherein

5 said second handling means include a single motor and are designed to disable translation of the container in the position to accumulate the articles and enable translation of the other of said two containers between said stand-by position and said one or more positions to release the stacks.

10 9. A machine according to any of the preceding claims, wherein bottom elements positioned under each of said containers are provided for bearing said stacks.

10. A machine according to any of the preceding claims, wherein
said bottom elements are mounted on said frame, and wherein means
15 are provided to produce vibrations in at least the bottom element
associated with the container in said accumulation position.

11. A machine according to any of the preceding claims, wherein
movable means are provided to obstruct or allow access of said articles
to said containers.

20 12. A machine according to claim 1, wherein said articles are
produced in a thermoforming station positioned upstream of the
machine.

13. A machine according to any of the preceding claims, wherein the
compartments of said containers have the same number and the same
25 layout as the cavities in the mould in which said articles are formed.

14. A machine according to any of the preceding claims, wherein at
least one control unit is provided to operate said handling means in
synchronism with the production cycle of said thermoforming station.